

BUYING HELP

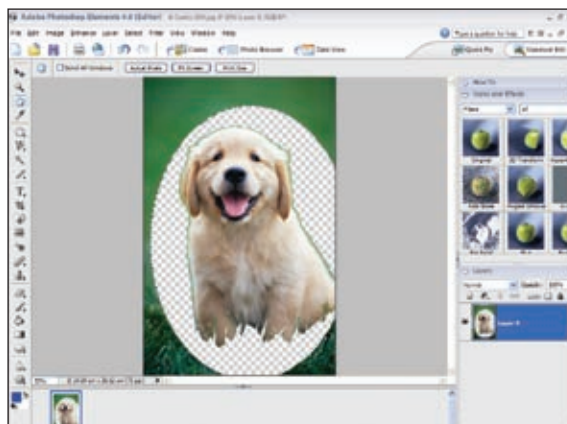
Honing cloning skills

Q I recently took several dozen digital photos at a friend's wedding. One is particularly good, and I would like to turn it into a large print that I can give to the happy couple. Unfortunately, a piece of confetti that was close to the camera is clearly visible in the top right-hand corner and appears as a pink blur. I'd like to remove this using my computer.

I tried to do this using Microsoft Paint, but it quickly became obvious that this wasn't going to produce a good result. Can you recommend an inexpensive software package that will allow me to remove this kind of blemish from my photographs?

Gregory Buchannan

A The best way to remove unwanted objects or people from a digital photograph is to use the clone tool. This tool allows you to select an area of background near to the object, and brush it over to cover the area you want to fill. Using a clone tool takes a little practice, but with care and patience you can produce stunning results. Most photo-editing software packages include a clone brush.



▲ Adobe's Photoshop Elements has the tools you'll need to ensure that small blemishes don't stay in the picture

Our favourite is Adobe's Photoshop Elements 4, which costs around £45 including VAT. Its clone brush is known as the clone stamp, and you can select it by clicking the rubber stamp-shaped icon in the toolbar. Hold down the Alt key and click on an area of suitable background to clone, then release the Alt key and click on the confetti to paint over it.

Home on the range

Q I would like to attach an external antenna to my notebook to improve its wireless networking range.

Obviously it would be impractical for me to delve inside the notebook to uncover the RF connectors, so I was wondering if I could buy something akin to the external mobile phone antennas I sometimes see on cars? This would consist of something that joins to the internal wireless antenna and an inductive pad on the other side.

I already have a suitable antenna that I could use for this purpose, so the pad would need a standard aerial connector. Do you know if such a product is available?

Martin Rushton

A We've never heard of a product that does this, but there are other ways to connect an external aerial to your notebook. The simplest is to fit a CardBus wireless adaptor with an external aerial connection, but we can't find one on sale in the UK. An alternative would be to use an external USB wireless adaptor such as Hawking's HWUG1. This has its own external aerial connector.

If this arrangement looks cumbersome, you could tape the HWUG1 to your aerial and connect it to your notebook via a USB extension cable. You'd then be left with one aerial unit, one notebook and a cable connecting the two. Finally, if you're feeling foolhardy, you could attempt to attach an external antenna to a CardBus wireless card. You can find instructions on how to do this at www.ivor.it/wireless/pigtail.htm.

Hard disk help

Q After downloading lots of music from the iTunes Music Store, my computer's hard disk has filled up. I want more storage space from the moment I turn on my PC, so I thought I'd fit an extra internal hard disk. Unfortunately, opening up the computer showed that I have no free IDE ports and no free bay for a new hard disk. Do you know of any external hard disks that can automatically turn on when my computer starts and turn off when I shut it down?

Jordan Carraway

A Several external hard disks will turn themselves on and off with your computer. Western Digital's MyBook range of desktop external hard disks all turn on when your computer

► Western Digital's MyBook hard disks turn on and shut down automatically



boots up, and turn off when it shuts down. The 320GB USB2 MyBook Essential costs around £85 including VAT from www.amazon.co.uk.

YOUR EXPERT

For advice on PC purchases, contact Buying Help

Tom Royal

Labs Editor Tom Royal can recommend the best product for your specific requirements.

buyinghelp@computershopper.co.uk



Megapixel madness

Q After years of sticking with my 35mm film camera and converting the images to digital files, I've decided to take the plunge and buy a digital SLR. Unfortunately, most of the newest models are out of my price range, so I've been looking at second-hand camera bodies. Most have the features that I'd expect from an SLR, but they produce images with fewer megapixels than the new models.

Will one of these older six-megapixel cameras produce pictures with as much detail as my film camera, or should I wait until the new 10-megapixel models have become cheaper? To put it another way, how many megapixels is equal to a picture taken on 35mm film?

George Baker

A Unfortunately, comparing the quality of 35mm film to digital cameras is not easy. It's important to remember that a camera with a higher number of megapixels does not necessarily produce better



▲ A 4,000dpi film scanner such as Nikon's CoolScan LS 50 ED produces images at a higher resolution than a 6-megapixel SLR

images. In our last digital cameras Labs test, for example, we found that Samsung's 10.1-megapixel NV10 was no sharper than its 7-megapixel rivals. If you're buying a digital SLR, the quality of the lenses you use will be more important. Using a poor lens on a brand new 10-megapixel camera could produce images that are less sharp than those from a cheaper, 6-megapixel camera with a better lens.

The number of megapixels produced by your 35mm film camera is hard to calculate. It depends on the quality of the lens, the type of film and the method you're using to scan your images. If your camera has a poor lens, enlarged images will look blurry. Similarly, if you use the low-resolution scans provided by most photo labs your pictures will have a far lower resolution than the images from a 6-megapixel digital SLR.

Using a good-quality 4,000dpi film scanner will allow you to produce images that measure almost 6,000x4,000 pixels. This is a higher resolution than that provided by a 6-megapixel digital SLR, which produces 3,000x2,000 pixel images. However, this doesn't mean that the film image is better. While the digital image could suffer from blurriness caused by the camera's noise-reduction algorithms, the film image could suffer from graininess.

Different types of 35mm film suffer from different levels of graininess. Grain is the factor that limits the extent to which an image can be enlarged before it begins to look blocky. It depends on the film process and the film's ISO rating. More sensitive films, with a higher ISO rating, allow you to take pictures in darker environments without resorting to a flash or using excessively long shutter speeds.

The downside is that these films exhibit more grain in the image. ISO 800 film, for example, is visibly grainy even when enlarged to relatively small prints. ISO 400 film isn't so bad, but if you scan it with a high-quality negative scanner you'll be able to see the grain. This means that you could scan the film to create a 6,000x4,000 pixel image, but it would look blocky.



▲ Six-megapixel DSLR cameras are becoming cheaper as they are replaced by models with 10-megapixel sensors

Less-sensitive films, with ISO ratings such as 100 and 50, have the least grain. In addition, slide films that use the E6 process tend to suffer from grain less than standard print films that use the C41 process. These films, such as Fuji's Velvia 50 and 100, are the best choice if you want to produce very large prints from a 35mm camera. The downside is that E6 film is extremely sensitive to under- and over-exposure, so you need considerable skill or an accurate light meter to get the best results from them.

The digital camera you should buy depends on the quality you're currently getting from your film camera. If you're using a good camera with a sharp lens to take pictures on ISO 50 Velvia slide film and then scanning the results with a 400dpi film scanner, you could be disappointed by the results from a 6-megapixel digital SLR. On the other hand, selling your film scanner for £400 would add enough to your budget to buy a newer camera with a 10-megapixel sensor.

If you're using standard print film and getting your images converted to digital at a high street photo lab, you should be happy with fewer than 10 megapixels. In fact, the 8-megapixel, Best Buy award-winning Canon EOS 350D can now be found for as little as £430 including VAT.

Wireless worries

Q I'm about to buy a new desktop computer and a multifunction peripheral (MFP). I want to put the MFP in my hallway and the computer in a bedroom. I do not want to connect the two with a cable. I have seen MFPs with built-in wireless networking, and many desktop computers have this, too. Is this all I need to connect my computer and printer together, or will I need to buy anything else?

I may subsequently wish to install a wireless broadband internet connection. Would this interfere with the wireless network used by my computer and printer?

Peter Edwards

A There are two types of wireless network: ad hoc and infrastructure. An ad hoc network links two or more devices together, and doesn't

require any other hardware. You could use one to link two computers in your house together, for example. An infrastructure network requires one central device that manages the network. In a home network, you would use a wireless router. All your computers and printers then connect to the router, and can communicate with each other.

▼ A wireless router allows you to connect your PC, printer and broadband internet connection



If your wireless MFP supports ad hoc wireless networking, you could connect it to your computer using an ad hoc wireless network. If you were then to add wireless broadband in the future, you'd need to get rid of this network and set up a new one. We'd recommend skipping this step and installing a proper infrastructure network in the first place.

To do this, you'll need to buy a router. If you're thinking of installing cable broadband, a simple wireless router will cost as little as £40. If you'll be adding ADSL broadband via your phone line, buy a router with a built-in ADSL modem. Our Best Buy, the SMC Barricade G Wireless Broadband Router, costs £58 including VAT. You can then connect your new PC and MFP to the wireless network it creates. When you get your broadband connection installed, you can simply plug it into the router, giving your PC instant wireless internet access. **CS**